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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/361,782	07/26/1999	BRIAN DEEN	MSI-390US	5941

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EXAMINER	
QUELER, ADAM M	

ART UNIT	PAPER NUMBER
2176	

DATE MAILED: 09/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/361,782	DEEN ET AL.	
	Examiner	Art Unit	
	Adam Queler	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 17 August 1999 .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-47 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-47 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 26 July 1999 is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s).
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

1. This action is responsive to communications: Application filed on 7/26/1999.

2. Claims 1-47 are pending in the case. Claims 1, 5, 14, 20, 31, 37, 41, and 44 are independent claims.

Drawings

3. The drawings were objected to by the draftsperson, please see attached form PTO-948.

Specification

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

5. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. For example on page 17, lines 10-25. Applicant is required to delete all embedded hyperlinks and/or other forms of browser-executable code. See MPEP § 608.01.

6. The disclosure is objected to because of the following informalities: On page 17, line 15 the closing tag "</contentlength>" appears to not have a start tag.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. **Claim 22 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.**

Regarding dependent claim 22, the specification does not disclose a method for processing the XML document without building the whole tree.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. **Claims 16, 17, 23, 25, 26, 41 and 42 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01.**

The omitted steps are: When calling the emitter object multiple times and emitting multiple amounts of data, it appears the applicant needs to claim that portions of the gathered data are passed to the multiple instances of the emitter, and each one emits a portion of the corresponding formatted data. For examining purposes only, the above meaning is being considered.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. **Claims 14, 19 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bayeh et al. (USPN 6012098—filed on 2/23/1998).**

Regarding independent claim 14, Bayeh et al. (Bayeh) discloses receiving a request (col. 10, lines 19-25). Bayeh also discloses gathering the data (col. 10, lines 46-58), and formatting the data into XML with a data servlet, which is equivalent to the emitter object (col. 11, lines 1-2). Bayeh also discloses sending the response (col. 11, lines 20-24), which is equivalent to emitting the formatted data. Bayeh is silent as to having separate objects doing separate tasks, however, it would have been obvious to one of ordinary skill in the art to have the emitter object do the formatting and emitting, as it was a common principle of object-oriented programming.

Regarding dependent claim 19, the program of claim 19 is the program for carrying out the method of claim 14 and is rejected under the same rationale.

Regarding independent claim 37, Bayeh discloses gathering the data (col. 10, lines 46-58), and formatting the data into XML with a data servlet, which is equivalent to the emitter object (col. 11, lines 1-2). Bayeh is silent on passing the emitter object the data gathered. However, Bayeh does teach that the data servlet does the gathering itself. Therefore, it would have been obvious

to one of ordinary skill in the art, to split the data servlet into two separate objects, and pass data between them, in order to divide the work between objects.

13. Claims 1-11, 13, 16-18, 20-26, 30-35, 38, 41, 42, 44-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bayeh, in view of Schloss et al. (USPN 6249844—filed on 11/13/1998).

Regarding independent claim 1, Bayeh et al. (Bayeh) discloses processing and formatting results as XML (FIG 5, step 260). Preparing is broadly interpreted by the examiner to be equivalent to formatting and processing. Bayeh also discloses sending the document as HTML. It would have been obvious for one of ordinary skill in the art to send the unconverted XML, as most web browsers are capable of reading XML. Bayeh is silent on preparing only a portion of the XML and then repeating the steps. Schloss et al. (Schloss) teaches that an XML document can be split up into segments, and then processed (col. 3, lines 21-49). It would have been obvious to one of ordinary skill in the art to modify Schloss into Bayeh, as splitting data into segments and sending them all, was a common optimization in network transport.

Regarding dependent claim 2, Bayeh discloses gathering the data (col. 10, lines 46-58), and formatting the data into XML with a data servlet, which is equivalent to an emitter object (col. 11, lines 1-2). Bayeh is silent on passing the emitter object the data gathered. However, Bayeh does teach that the data servlet does the gathering itself. Therefore, it would have been obvious to one of ordinary skill in the art, to split the data servlet into two separate objects, and pass data between them.

Regarding dependent claim 3, Bayeh discloses gathering the data (col. 10, lines 46-58), which is equivalent to a gathering object.

Regarding dependent claim 4, Bayeh discloses receiving a request (col. 10, lines 19-25).

Regarding independent claim 5, claim 5 is rejected similarly as dependent claim 1 as described above, and in addition, Bayeh discloses receiving a request (col. 10, lines 19-25).

Regarding dependent claim 10, Bayeh discloses gathering the data (col. 10, lines 46-58), and formatting the data into XML with a data servlet, which is equivalent to a data formatting mechanism (col. 11, lines 1-2). However, it would have been obvious to one of ordinary skill in the art at the time of the invention to divide this work among a data-gathering mechanism, and a data-formatting mechanism as this was a common principle of object-oriented programming.

Regarding dependent claims 13 and 30, the programs of claims 13 and 30 are the programs for carrying out the methods of claims 5 and 20 and are rejected under the same rationale.

Regarding independent claim 20, Bayeh discloses receiving an XML request (col. 10, lines 19-25). Bayeh also discloses a servlet, equivalent to an object for gathering a response to the request (col. 10, lines 30-40). Bayeh and Schloss are silent as to passing the emitter object the data gathered. However, Bayeh does teach that the data servlet does the gathering itself. Therefore. it would have been obvious to one of ordinary skill in the art, to split the data servlet into two separate objects, and pass data between them.

Bayeh is silent as to generating a portion of the response. Schloss teaches that an XML document can be split up into segments, and then processed (col. 3, lines 21-49). It would have been obvious to one of ordinary skill in the art to modify Schloss into Bayeh, as generating parts of documents based on segments of incoming data, was a common practice of streaming data.

Bayeh is silent as to the request containing a WebDAV method. It would have been obvious to one of ordinary skill in the art to have a request with a WebDAV method, as a WebDAV method is a request for an XML response. It would have been inherent to determine the particular method before processing the request.

Regarding dependent claims 11 and 21, Bayeh discloses sending the response with a rendering servlet (col. 11, lines 20-24), which is equivalent to a response-sending mechanism. Bayeh teaches the response sending mechanism converts the XML into HTML, instead of just sending it (col. 11, lines 34-43). It would have been obvious for one of ordinary skill in the art to send the unconverted XML, as most web browsers are capable of reading XML.

Regarding dependent claim 22, it would have been obvious to one of ordinary skill in the art to send the XML document without building the entire tree, as it was common to send raw text without processing it.

Regarding dependent claims 13 and 30, the programs of claims 13 and 30 are the programs for carrying out the methods of claims 5 and 20 rejected under the same rationale.

Regarding independent claim 31, Bayeh discloses a combined request-receiving mechanism (col. 10, lines 30-40) and response-preparing mechanism (col. 11, lines 1-2). Bayeh also discloses a sending mechanism as described in claims 11 and 21. Bayeh is silent on preparing only a portion of the XML and then repeating the steps. Schloss teaches that an XML document can be split up into segments, and then processed (col. 3, lines 21-49). It would have been obvious to one of ordinary skill in the art to modify Schloss into Bayeh, as splitting data into segments and sending them, was a common optimization in network transport.

Regarding dependent claim 6, 16, 23, 24, 26, and 32, Bayeh is silent as to calling and emitting multiple times. Schloss teaches that an XML document can be split up into segments, and then processed (col. 3, lines 21-49). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to call the emitter multiple times and emitting multiple times, in order to process these segments.

Regarding dependent claim 35, Bayer discloses a data servlet, equivalent to a response-preparing mechanism that gathers the data (col. 10, lines 46-58), and formats it (col. 11, lines 1-2).

Regarding dependent claim 38, Bayeh is silent on emitting only a portion of the XML. Schloss teaches that an XML document can be split up into segments, and then processed (col. 3, lines 21-49). It would have been obvious to one of ordinary skill in the art to modify Schloss into Bayeh, as splitting data in to portions, was a common optimization in network transport.

Regarding independent claim 41, Bayeh discloses receiving a request (col. 10, lines 19-25). Bayeh also discloses a servlet, equivalent to an object for gathering a response to the request (col. 10, lines 30-40). This is equivalent to being an object that corresponds to an HTTP verb; as the object in the instant invention would exist; for the purpose of gatheingr the information designated by the HTTP verb. It would have been inherent to determine the particular method before processing the request.

Bayeh discloses formatting the data into XML with the above servlet, which is equivalent to an emitter object (col. 11, lines 1-2). Bayeh is silent on passing the emitter object the data gathered. However, Bayeh does teach that the servlet does the gathering itself. Therefore, it would have

been obvious to one of ordinary skill in the art, to split the data servlet into two separate objects, request and emitter, and pass data between them.

Bayeh discloses sending the response with a rendering servlet (col. 11, lines 20-24), which is equivalent to a response-sending mechanism. Bayeh teaches the response sending mechanism converts the XML into HTML, instead of just sending it (col. 11, lines 34-43). It would have been obvious for one of ordinary skill in the art to send the unconverted XML, as most web browsers are capable of reading XML.

Bayeh is silent as to calling and emitting multiple times. Schloss teaches that an XML document can be split up into segments, and then processed (col. 3, lines 21-49). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to call the emitter multiple times and emitting multiple times, in order to process these segments.

Regarding dependent claim 7, 17, 25, 34, and 42, Bayeh is silent as to calling and emitting in a defined order. Schloss discloses a method of splitting an XML document into segments, by processing the data in order (col. 3, lines 21-49). Therefore, it would have been obvious to one of ordinary skill in the art to pass and emit the segments in a defined order since they would have been generated in order.

Regarding dependent claims 8, claim 8 is rejected similarly as dependent claim 7, as described above, and in addition; Bayeh and Schloss are silent as to the XML document comprising a multi-status response. However, it would have been obvious to one of ordinary skill in the art to include a multi-status response, as it was a common XML response.

Regarding dependent claims 9, 18 and 33, Bayeh and Schloss are silent as to the XML document comprising a multi-status response. However, it would have been obvious to one of ordinary skill in the art to include a multi-status response, as it was a common XML response.

Regarding independent claim 44, Bayeh discloses a servlet, equivalent to code that receives an XML request (col. 10, lines 30-40). Bayeh also teaches that this object gathers the information desired in the request. This is equivalent to being an object that corresponds to an HTTP verb; as the object in the instant invention would have the purpose of gather the information designated by the HTTP verb.

Bayeh is silent on preparing only a portion of the XML and then repeating the steps. Schloss teaches that an XML document can be split up into segments, and then processed (col. 3, lines 21-49). It would have been obvious to one of ordinary skill in the art to modify Schloss into Bayeh, as splitting data into segments and sending them all, was a common optimization in network transport.

Regarding dependent claim 45, Bayeh discloses having unique servlets for different purposes, or verbs (col. 10, lines 30-40).

Regarding dependent claim 46, Bayeh discloses calling another object and passing the information to be included in the response (col. 11, lines 20-24).

Regarding dependent claim 47, Bayeh is silent on passing the data to another object in order to format it. However, Bayeh does teach that formatting is done by the first object. It would have been obvious to one of ordinary skill in the art to split the first object into two separate objects, as this was a common practice in object-oriented programming.

14. Claims 12, 27-29, 36, 39, 40, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bayeh in view of Schloss as applied to claims 11, 20, 31, 38 and 41 above, and further in view of Kavner (USPN 6366947—filed on 1/20/1998).

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bayeh as applied to claims 14 above, and further in view of Schloss and Kavner (USPN 6366947—filed on 1/20/1998.

Regarding dependent claim 12, 36, and 39, Bayeh and Schloss are silent as to using a buffer. Kavner discloses a buffer that buffers a response until it is filled, and then empties, or sends the buffer to the client (col. 10, lines 7-14). There intrinsically must be a threshold in order for the buffer to be full. It would have been obvious to one of ordinary skill in the art to modify Kavner into Bayeh and Schloss as using a buffer was a well-known process in network transport.

Regarding dependent claim 27, Bayeh and Schloss are silent as to using a buffer. Kavner discloses a buffer that buffers a response until it is filled, and then empties, or sends the buffer to the client (col. 10, lines 7-14). It would have been obvious to one of ordinary skill in the art to modify Kavner into Bayeh and Schloss as using a buffer was a well-known process in network transport.

Regarding dependent claims 28, 40, and 43, Bayeh, Schloss, and Kavner are silent as to sending less then an entirety of a response. However, it would have been obvious to one of ordinary skill in the art to send less the entirety of the response, since each portion is syntactically correct.

Regarding dependent claims 29, the buffer disclosed in Kavner must inherently have a threshold in order for the buffer to be full.

Regarding dependent claim 15, Bayeh is silent on preparing less then a full response. Schloss teaches that an XML document can be split up into segments, and then processed (col. 3, lines 21-49). It would have been obvious to one of ordinary skill in the art to modify Schloss into Bayeh, as splitting data into segments and sending them all, was a common optimization in network transport.

Bayeh is silent as to using a buffer. Kavner discloses a buffer that buffers a response until it is filled, and then empties, or sends the buffer to the client (col. 10, lines 7-14). There intrinsically must be a threshold in order for the buffer to be full. It would have been obvious to one of ordinary skill in the art to modify Kavner into Bayeh as using a buffer was a well-known process in network transport.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

USPN 5701451 to Rogers et al.
USPN 5928335 to Morita

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam Queler whose telephone number is (703) 308-5213. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on (703) 308-5186. The fax phone numbers for the

organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-5631.

AQ
September 10, 2002

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